SECTION 19
SOIL EROSION AND SEDIMENT CONTROL REGULATIONS FOR LAND DEVELOPMENT

19.1 Definitions

a. "Certification" means a signed, written approval; by the Town Plan and Zoning Commission that the Soil Erosion and Sediment Control Plan as presented complies with this regulation and the minimum acceptable standards established in Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended.

b. "Commission" means the Town Plan and Zoning Commission of the Town of Glastonbury.

c. "County Soil and Water Conservation District" means the Hartford County Soil and Water Conservation District established under subsection (a) of Section 22a-315 of the General Statues.

d. "Development" means any construction on improved or unimproved real property located in the Town of Glastonbury, including, but not limited to any grading activities or vegetation removal associated with such construction.

e. "Disturbed Area" means an area where the ground cover is destroyed or removed leaving the land subject to accelerated erosion.

f. "Erosion" means the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

g. "Grading" means any excavating, grubbing, filling (including hydraulic fill) or stockpiling or earth materials or any combination thereof, including the land in its excavated or filled condition.

h. "Inspection" means the periodic review of sediment and erosion control measures shown on the certified plan.

i. "Sediment' means solid material, either mineral or organic, that is in suspension, is transported, or has been moved from site of origin by erosion.

j. "Soil" means any unconsolidated mineral or organic material of any origin.

k. "Soil Erosion and Sediment Control Plan" means a scheme that minimizes soil erosion and sedimentation resulting from development and includes, but is not limited to, a map and narrative.

19.2 Activities Requiring A Certified Erosion And Sediment Control Plan

A Soil Erosion and Sediment Control Plan shall be submitted with any application for development when the disturbed area of such development is cumulatively more than one-half acre.

a. EXEMPTIONS

A single family dwelling that is not a part of a subdivision of land shall be exempt from these soil erosion and sediment control regulations.

19.3 Soil Erosion And Sediment Control Plan

a. To be eligible for certification, a Soil Erosion and Sediment Control Plan shall contain proper provisions to adequately control accelerated erosion and sedimentation and reduce the danger from storm water runoff on the proposed site based on the best available technology. Such principles, methods and practices necessary for certification are found in the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended.

b. Said plan shall contain, but not be limited to:

1. A narrative describing:

a.) The development;

b.) The schedule for grading and construction activates including:

c.) Start and completion dates;

d.) Sequence of grading and construction activities;

e.) Sequence for installation and/or application of soil erosion and sediment control measures;

f.) Sequence for final stabilization of the project site.

g.) The design criteria for proposed soil erosion and sediment control measures and storm water management facilities;

h.) The construction details for proposed soil erosion and sediment control measures and storm water management facilities;

i.) The installation and/or application procedures for proposed soil erosion and sediment control measures and storm water management facilities;

j.) The operation sand maintenance program for proposed soil erosion and sediment control measures and storm water management facilities.

2. A site plan at a scale of no less than 1" = 40' to show:

a.) The location of the proposed development and adjacent properties;

b.) The existing and proposed topography including soil types, wetlands, watercourses and water bodies;

c.) The existing structures on the project site, if any;

d.) The proposed area alterations including cleared, excavated, filled or graded areas and proposed structures, utilities, roads and, if applicable, new property lines;

e.) The location of and design details for all proposed soil erosion and sediment control measures and storm water management facilities;

f.) The sequence of grading and construction activities;

g.) The sequence for installation and/or application of soil erosion and sediment control measures;

h.) The sequence for final stabilization of the development site.

c. Any other information deemed necessary and appropriate by the applicant or requested by the Commission or its designated agent, including but not limited to watershed map(s) and a statement of the project's impact on watershed(s).

19.4 Minimum Acceptable Standards

a. Plans for soil erosion and sediment control shall be developed in accordance with these regulations using the principles as outlined in Chapters 3 and 4 of the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended. Soil erosion and sediment control plans shall result in a development that minimizes erosion and sedimentation during construction; is stabilized and protected from erosion when completed; and does not cause off-site erosion and/or sedimentation.

b. The minimum standards for individual measures are those in the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended. The Commission may grant exceptions when requested by the applicant if technically sound reasons are presented.

c. The appropriate method from Chapter 9 of the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended, shall be used in determining peak flow rates and volumes of runoff unless an alternative method is approved by the Commission.

19.5 Issuance Or Denial Of Certification

a. The Commission shall either certify that the Soil Erosion and Sediment Control Plan, as submitted, complies with the requirements and objectives of this regulation or deny certification when the Soil Erosion and Sediment Control Plan does not comply with these regulations.

b. Nothing in these regulations shall be construed as extending the time limits for the approval of any application under Chapters 124, 124A or 126 of the General Statutes.

c. Prior to certification, any Soil Erosion and Sediment Control Plan submitted to the municipality may be reviewed by the County Soil and Water Conservation District which may make recommendations concerning such plan, provided such review shall be completed within thirty (30) days of the receipt of such plan.

d. The Commission or its designated agent shall forward a copy of the development proposal including the Soil Erosion and Sediment Control Plan to the Conservation Commission for review and recommendation.

19.6 Conditions Relating To Soil Erosion And Sediment Control

a. Site development shall not begin unless the Soil Erosion and Sediment Control Plan is certified and those control measures and facilities in the certified Soil Erosion and Sediment Control Plan which are scheduled for installation prior to site development are installed and functional. If any such site development is begun prior to the time that such pre-development control measures and facilities, as required under such certified plan, a re installed and functional, and such site development continues after written notice is provided to the permittee under such certified plan, or such permittee's designated agent, advising of the failure to comply with the certified plan, the Commission may suspend or revoke its certification of such certified plan.

b. Planned soil erosion and sediment control measures and facilities shall be installed as scheduled according to the certified Soil Erosion and Sediment Control Plan.

c. All control measures and facilities shall be maintained in effective condition to ensure the compliance of the certified Soil Erosion and Sediment Control Plan.

19.7 Monitoring And Inspection

a. Inspections may be made by the Commission or Town staff during development to ensure compliance with the certified Soil Erosion and Sediment Control Plan and that control measures and facilities are properly performed or installed and maintained. The Commission and any agent designated by the Commission to make inspections shall be allowed to access the project site at any time.

b. The permittee shall verify through progress reports as required by the Commission that soil erosion and sediment control measures and facilities have been performed or installed according to the certified Soil Erosion and Sediment Control Plan and are being operated and maintained.

c. Prior to initiation of development activity, the permittee shall place on file with the Commission a letter identifying designated person(s) responsible for implementation of the certified Soil Erosion and Sediment Control Plan and with whom inspectors representing the Town may communicate routinely.

d. The Commission shall designate agents who shall have authority to act in the field in the event of:

    1. Unforeseen developments and emergencies which require immediate remedial action.

    2. A need for minor amendments or adjustments to a certified Soil Erosion and Sediment Control Plan that will enhance effectiveness of the erosion/sediment control measures.

e. It is the permittee's responsibility to anticipate unforeseen erosion or sedimentation problems and emergencies and to have the capability to deal effectively with such problems. In the event of an unforeseen emergency in which adjacent properties, roadways, wetlands or watercourses in the Town of Glastonbury face imminent danger of pollution or obstruction from erosion and sedimentation and the permittee or his designated agent cannot be contacted through reasonable effort, the Commission shall empower its agent to act to stem the threat of erosion and sedimentation. Except to the extent prohibited by applicable law, the expense for remedial action shall be recoverable from the permittee under the certified Soil Erosion and Sediment Control Plan.

19.8 Minor Amendments To Certified Soil Erosion And Sediment Control Plan

Minor amendments to a certified Soil Erosion and Sediment Control Plan may be approved by the Commission's designated agents provided that the proposed amendment:

a. Involves the replacement of inadequate or failed control materials or devices with those determined to be more effective by the designated agent;

b. Does not adversely change an approved restoration schedule;

c. Is not a substantial redesign of the certified Soil Erosion and Sediment Control Plan or narrative, in the agent's opinion.

The permittee or the Commission's agent may petition the Commission for substantial amendments to the Certified Soil Erosion and Sediment Control Plan. The permittee will be notified in writing if the Commission's Agent petitions the Commission for substantial amendments to the Certified Soil Erosion and Sediment Control Plan.

AMENDED ADOPTED DECEMBER 10, 1985

AMENDED EFFECTIVE DECEMBER 23, 1985

WORDING FOR CERTIFICATION STAMP
(TO VERIFY "CERTIFICATION" AS DEFINED IN SOIL EROSION AND SEDIMENT CONTROL REGULATION)

IT IS HEREBY CERTIFIED THAT THIS SOIL EROSION AND SEDIMENT CONTROL PLAN IS IN COMPLIANCE WITH SECTION 19 OF THE GLASTONBURY BUILDING-ZONE REGULATIONS OR SECTION 5.7.b (13) OF THE GLASTONBURY SUBDIVISION AND RESUBDIVISION REGULATIONS, AS APPLICABLE, AND THAT IT SATISFIES THE MINIMUM STANDARDS ESTABLISHED IN CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL (1985), AS AMENDED.

THE PERMITTEE UNDER THIS PLAN IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH THIS PLAN. THE TOWN OF GLASTONBURY SHALL NOT BE HELD LIABLE FOR IMPROPER INSTALLATION, LACK OF MAINTENANCE OR OTHER NEGLECT ON BEHALF OF THE PERMITTEE.

_____ DATE: _____

CHAIRMAN OR SECRETARY OF THE TOWN
PLAN AND ZONING COMMISSION

Adopted October 10, 1995 and to be in effect January 1, 1996 and March 1, 1996 (see last page)

AMENDMENT TO THE

TOWN OF GLASTONBURY BUILDING ZONE REGULATIONS

SECTION 20
GROUNDWATER PROTECTION

20.1 Purpose

This section is adopted pursuant to the authority conferred by Section 8-2 of the Connecticut General Statute for the following purposes: to secure the public health, safety and general welfare; to preserve and protect from new contamination the Groundwater resources currently in use and those Aquifers having a high potential for future use as a public water supply in order to ensure a safe and adequate water supply for present and future generations; and to regulate land uses in manner consistent with Groundwater protection needs.

20.2 Applicability

The provisions of this section shall apply to all land within the boundaries of the Town of Glastonbury except for state and federal land uses and structures which are exempt from these regulations. Specific Groundwater protection zones, as shown on the map identified in Section 20.9 of the Regulations are Overlay Zones established to further protect special areas of concern. Land shall be used and structures erected, constructed, reconstructed, altered or used in conformance with this Section 20 and all other requirements of the underlying zone.

The provisions in this Section 20 are not intended to repeal, abrogate, or annul any portion of these regulations, other Town regulations, existing State or Federal laws and regulations or existing easements, covenants or deed restrictions. In any case where there is a conflict between any of the foregoing and this Section 20, whichever imposes the most stringent restriction shall apply.

The management practices of applying sand and deicing agents to highways, roads, driveways, parking lots, sidewalks or other vehicular or pedestrian traveled ways are not subject to this Section 20.

20.3 Regulating Agency And Their Agents

The Town Plan and Zoning Commission shall be the regulating agency for the administration of these Groundwater protection regulations. Planning staff from the Office of Community Development shall serve as Authorized Agents of the Commission in the administration of this Section 20.

20.4 Definitions

For the purpose of this Section 20 the following definitions shall apply:

a. "Applicant" means any person, firm, partnership, association, corporation, company, organization or any other private or political entity of any kind, including, but not limited to, any municipal agency or subdivision thereof in which the Applicant's proposed land use, construction or use of a structure/building by any of the foregoing is subject to the provisions of this Section 20.

b. "Aquifer" means a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable materials to yield quantities of water to wells and/or springs. Such a formation is usually, but is not necessarily, composed of bedrock or sand or gravel.

c. "Authorized Agent" means the professional planning staff of the Town's Office of Community Development which includes its Director, Environmental Planned and Planner.

d. "Bedrock" means solid rock, commonly called "ledge," that forms the earth's crust. It is locally exposed at the land surface in Connecticut, but is more commonly buried beneath a few inches to more than 300 feet of unconsolidated materials.

e. "Commission" means the Town Plan and Zoning Commission of the Town of Glastonbury.

f. "Comprehensive Site-Specific Evaluation" means an assessment of a site's hydrogeologic characteristics which shall include, but not be limited to: percolation rate above the water table; soil profile to a depth of ten (10) feet or to bedrock (whichever comes first); depth to water table; and below the water table a determination of hydraulic conductivity for estimates of contaminant transport and hydraulic gradient.

g. "DEP" means the Department of Environmental Protections of the State of Connecticut.

h. "EPA" means the Environmental Protection Agency of the United States of America.

i. "Glacial Till" or "Till" means a predominantly nonsorted, nonstratified sediment deposited directly by a glacier and composed of boulders, gravel, sand, silt and clay, mixed in various proportions.

j. "Groundwater" means all the water beneath the surface of the ground and in the Saturated Zone.

k. "Groundwater Protection Permit" means a special permit issued to the Applicant once an application is approved by the Commission.

l. "Hazardous Material" or "Hazardous Substance" means a substance, solution or mixture (as defined by the applicable Federal and State laws and regulations) that present an actual or potential hazard to human health or to the drinking water supply. Comprehensive listings of hazardous materials or substances appear within the Superfund Amendments and Reauthorization ACT (SARA) and Resource Conservation and Recovery Act (RCRA); such listings are available at the local Health Department. "Hazardous Material" is either a product or waste, or combination of substances which because of quantity, concentration, or physical, or chemical or infectious characteristics, poses an actual or potential hazard to human health, safety, stored, transported, used or disposed of or otherwise managed. "Hazardous Materials" include, but are not limited to:

1. Any material defined as a "hazardous Chemical," "extremely hazardous substance," or "toxic chemical" in the State and Federal laws and regulations;

2. Acids and alkalies outside the Ph range of 4 to 10;

3. Petroleum products, including fuels and waste oils;

4. Synthetic organic solvents; and

5. Any solid material which if exposed to water will leach or dissolve to form a hazardous material as defined above.

m. "Health Department" means the Health Department of the Town of Glastonbury.

n. "Hydraulic Conductivity" means a measure of the ability of a porous medium to transmit a fluid.

o. "Large Quantity of Hazardous Material" means that either 1) at least 2,200 pounds or 250 gallons of a Hazardous Material or Hazardous Substance is generated at the site per month or 2) at least 22,000 pounds or 2,500 gallons of all Hazardous Materials or Hazardous Substance, including Hazardous Waste, are at the site at any one time.

p. "Overlay Zone" means a separate (i.e., GW-1 or GW-2) zone that is superimposed over the underlying zones. Activities in such overlay zones are subject to the requirements of both the underlying zone and overlay zone.

q. "Regulations" means the Town of Glastonbury Building Zone Regulations.

r. "Saturated Zone" means subsurface zone in which all open spaces are filled with water under pressure equal to or greater than atmospheric pressure.

s. "Seasonal High Groundwater Table" means the median level, as measured by the Health Department, to which groundwater rises over the duration of one month or longer during the wettest season of they year.

t. "Small Quantity of Hazardous Material" means that the quantities are less than those established for a large Quantity of Hazardous Material.

u. "Stratified Drift" means predominantly unconsolidated, sorted sediment composed of layers of sand, gravel, silt or clay deposited by meltwaters from glaciers.

v. "Town Manager or Designee" means the Town Manager of the Town of Glastonbury or another town staff person (e.g. Fire Marshal, Building Official and Zoning Enforcement Officer, Health Director, Town Engineer or Environmental Planner) specifically selected by the Town Manager to administer certain aspects of this Section 20.

20.5 Grandfather Clause And Nonconforming Uses

Uses existing at the effective date of this regulation that do not comply with the provisions of this Section 20 shall be considered nonconforming or "grand fathered" and may be continued, maintained and repaired in accordance with Section 8 of these Regulations. In addition to the provisions of Section 8, the following limitations shall apply to nonconforming uses.

a. Any enlargement or expansion of a nonconforming use shall be subject to the requirements of this Section 20. It is the express intent of this Section 20 that such enlargement or expansion shall not increase the degree of risk to the Groundwater resources.

b. To enlarge or expand a nonconforming use the Commission shall require the Applicant to show that the entire facility after expansion will meet performance and design standards specified in Sections 20.8 and 20.13 of these Regulations.

c. No nonconforming use shall be changed to another use without regard to the requirements contained in this Section 20, and no nonconforming use shall be changed to a use prohibited under Sections 20.10.1 and 20.16 of these Regulations.

20.6 Farms

Farms, as defined in Section 2.17 of these Regulations are exempt from this Section 20 with the exception of the requirements of Section 20.8.1.b, but are encouraged to establish a farm resource management plan utilizing assistance from the Hartford County Soil and Water Conservation District and/or the DEP. Certain commercial greenhouses and nurseries are excluded from the farm definition, as established in Section 2.17 of these Regulations, and therefore are subject to the Groundwater protection regulations of this Section 20.

20.7 Townwide Prohibition Of Residential Underground Fuel Storage Tanks

New or replacement residential underground fuel storage tanks, except for liquid propane, are prohibited in the Town of Glastonbury. The Commission cannot waive the prohibition of this Section 20.7.

20.8 Townwide Design Standards And Specifications

The objective of design standards and specifications is to prevent adverse impacts to the Groundwater resources from nonresidential and residential uses as further specified in Section 20.8. All land areas within the Town of Glastonbury for the specified uses are subject to these design standards and specifications. All proposed uses and applicable nonconforming uses pursuant to Section 20.5 of these Regulations shall conform to specified standards. This Section 20.8 shall be administered by the Town Manager or Designee, and such administration includes, but is not limited to determining compliance to the design standards and specifications.

20.8.1 Hazardous Materials Storage Handling and Disposal for Nonresidential Uses.

The following subsections 20.8.1.a through 20.8.1.e inclusive shall only apply to uses of lands that regularly or routinely utilize or produce Hazardous Materials.

a. General.

1. Hazardous Materials or Hazardous Substances that are to be utilized or generated in connection with the nonresidential uses shall be identified and noted on the site plan. Hazardous Materials and Hazardous Substances quantities shall be recorded and continually updated by the property owner/occupant on register that shall be available for inspection by the Town Manager Or Designee.

2. All generators of Hazardous Materials or Hazardous Substances shall apply for and obtain all necessary permits and registrations required by EPA and DEP. All generators of Hazardous Materials or Hazardous Substances that are classified as "small generators" by EPA and DEP shall provide: (i) for the collection, transport, and ultimate disposal of said Hazardous Materials or Hazardous Substances, consistent with the best available management practices, by a registered hauler, as defined and licensed by EPA and DEP; a registered and (ii) upon request by Town Manager or Designee, document records for the same.

3. All new and replacement facilities to be used for the production or storage of Hazardous Materials or Hazardous Substances shall be designed and constructed in a manner which will provide the maximum protection against contamination of Groundwater from leakage or spillage of Hazardous Materials or Hazardous Substances. Storage facilities shall meet applicable specifications of the most current standards established by the National Fire Prevention Association. Storage facilities shall conform to applicable procedures and regulations of the EPA, DEP and the local Fire Marshal.

4. Thee applicant shall include contingency plans which shall include a description of proposed actions, measures and methods for the cleanup and disposal of leaked or spilled Hazardous Materials or Hazardous Substances. In the event of a leak or spill, Groundwater samples shall be obtained as prescribed by the Town Manager or Designee. If the concentration of any chemical in Groundwater sample exceeds the applicable limits established by the DEP, EPA or State of Connecticut Department of Health Services, and if re-sampling confirms the concentrations, the property owner shall take immediate remedial action to reduce the concentrations of Hazardous Materials and Hazardous Substances in Groundwater to levels acceptable to the Town Manager or Designee in consultation with the DEP, the EPA or the State of Connecticut Department of Health Services.

5. Any area to be used for loading or transfer of Hazardous Materials or Hazardous Substances shall be paved and designed to control and capture any leaks or spills of materials being transferred to service or storage areas. Uses involving the handling of Large Quantities Of Hazardous Material shall coordinate the location and/or design of catch basins or other storm water inlet structures with proposed loading, handling and storage areas. Design elements of proposed structures shall be required by the Town Manager or Designee to provide confinement for Hazardous Materials or Hazardous Substances in the event of an accident or a spill. Contingency plans shall be prepared listing emergency responses that prevent Hazardous Materials or Hazardous Substances from entering storm water drainage facilities. Periodic certified training of individuals responsible for enacting such documentation of this periodic certified training shall be submitted to the Town Manager or Designee.

6. Any leaks or spills of Hazardous Materials or Hazardous Substances shall be reported to the Town Manager or Designee and the local Fire Marshal's Office immediately upon discovery of such leak or spill regardless of quantity or perceived potential impact upon Groundwater.

7. The use of drywells, leaching structures or other infiltration structures for roadways, parking lots and other paved areas are prohibited.

8. Disposal of Hazardous Materials or Hazardous Substances into the sanity of sewers, at the municipal landfill, or other municipal facilities is prohibited except for instances where the required reviews and approvals are obtained from the DEP.

9. Land disposal of Hazardous Materials or Hazardous Substances on the premises is prohibited except for instances where the DEP had issued a permit for disposal into a subsurface disposal system.

b. Underground Storage Tanks and Facilities.

1. Each nonresidential underground tank or container, regardless of size, shall:

a.) be a double-walled fiberglass-reinforced plastic (FRP) tank which is equipped with contact plates under all fill and gauge openings and is chemically compatible with the contained product as determined by the Town Manager Or Designee utilizing the tank or container manufacturer's warranty; or

b.) be a double-walled steel tank externally coated with a factory applied corrosion resistant coating approved by the Town Manager Or Designee utilizing information provided by the manufacturer the proposed use; (ii) shall be inspected during tank installation for any damage; (iii) if damage is discovered to the coating it shall be repaired to preserve the tank's integrity; and (iv) the tank shall be equipped with cathodic protection and permanent cathodic protection monitoring devices together with contact plates under all fill and gauge openings; or

c.) such other material as is consistent with the industry standard at the time such tank is placed into service provided that such material is approved in advance in writing by the Town Manager or Designee.

2. All other underground facility components shall:

a.) be protected against corrosion by use of noncorrosive materials or steel components with factory applied corrosion resistant coating and cathodic protection and permanent cathodic protection monitoring devices.

b.) be designed, constructed, and installed so as to allow failure determination of all underground piping without the need for substantial excavation.;

c.) be chemically compatible with the intended use as determined by the manufacturer's warranty; and

d.) conform to standards on Piping, Fittings and Connections as set forth in Section 20.8.1.e of these Regulations.

3. Liquid propane storage tanks are not subject to Section 20.8.1.e of these Regulations.

c. Outdoor Aboveground Storage Tanks, Containers And Other Facilities.

1. Except as provided in subparagraph (2) below, aboveground storage tanks shall consist of either:

a.) an aboveground tank placed within an impervious containment area enclosed by a dike or berm. The containment area shall be coated with a sealant resistant to the material to be stored and of adequate size to contain at least 110% of the

volume of the largest tank, excluding the volume with the containment area occupied by tanks. The containment area shall be protected from rainwater accumulation with permanent non-permeable roof. Tanks shall be supplied with a mechanical type level gauge and not a sight tube. Top vent pipes or overfill pipes for tanks shall have any potential spillage directed to the inside of the contaminant area.

b.) a preassembled aboveground tank system consisting of a primary tank surrounded by a secondary containment tank. The secondary containment tank shall either be impervious or be equipped with an impervious liner and shall be capable of containing 100% of the primary tank volume. All permitted from the top of the tank. All such tanks must be designed, manufactured and located in accordance with the most current standards established by the National Fire Prevention Association.

2. Spillage from tanks containing flammable materials may drain to a remote impoundment area that the drainage and containment system is sealed to prevent loss of Hazardous Material or Hazardous Substances to the Groundwater.

3. Outdoor storage facilities for portable containers (e.g. drums) and tanks containing Hazardous Materials or Hazardous substances shall be designed to provide impervious containment adequate to contain at least 30% of the total volume to be stored or at least 100% of the volume of the largest tank, whichever is the larger volume. Drainage of precipitation from within the containment area shall be disposed of in manner that will prevent and Hazardous Materials or Hazardous Substances from entering the ground or Groundwater (e.g. roofs or drain valves). All containers and drums shall be sealed.

4. Dumpsters shall be on a concrete pad or paved area, shall be covered or located within a roofed area, and shall be water tight with any drain plugs intact. All outdoor storage facilities shall be designed to provide for adequate security to protect toxic materials, Hazardous Materials or Hazardous Substances from vandalism or accident.

5. Outdoor bulk storage facilities, including but not limited to facilities for the storage of non-farm related manure, fertilizers and salt, shall be designed with an impervious floor to prevent contact of stored material with the ground together with a non-permeable roof to prevent precipitation from reaching the stored materials.

6. Liquid propane storage tanks are not subject to Section 20.8.1.c of these Regulations.

7. Piping, fittings and connections shall conform to the standards as set forth in Section 20.8.1.e of these Regulations.

d. Indoor Storage Facilities.

1. Indoor storage tank areas, including nonresidential basement fuel tanks, and facilities to be used for storage of Hazardous Materials or Hazardous Substances in portable tanks or containers shall be on an impervious floor without floor drains and within and impervious containment area or connected to a remote impoundment area with an impervious drainage system. The containment area shall be adequate to contain 100% of the entire storage volume, unless the Town Manager Or Designee determines that a smaller containment volume is adequate to provide containment of Hazardous Materials or Hazardous Substances generated from fire fighting within the building.

2. Any open tanks, vessels or vats that may contain Hazardous Material or Hazardous Substances in an area equipped with a sprinkler system shall implement the best

techniques acceptable to the Town Manager or Designee, to deter spillage or overtopping from said open tank, vessel or vat without compromising the fire fighting need of the sprinkler. Such acceptable techniques shall include, but shall not be limited to, the location or positions of the tank, vessel or vat in relation to the sprinkler head, head deflectors and automatic covers.

e. Piping, Fittings and Connections

1. Piping, fittings and connections to be used with Hazardous Materials or Hazardous Substances shall be protected against corrosion by the use of noncorrosive materials, cathodic protection or equivalent designs acceptable to the Town Manager or Designee.

2. Underground piping to be used with Hazardous materials or Hazardous Substances for fuel shall be constructed of double-walled pipe or installed in impervious trenches or galleys.

3. Underground piping shall be designed with access points to permit periodic pressure testing without extensive excavation, and with a reliable means of monitoring the installation for leakage. Such periodic pressure testing shall be performed by the property owner and documented for inspection by the Town Manager or Designee.

20.8.2 Floor Drains for Nonresidential and Residential Uses Involving Hazardous materials.

a. Interior floor drains from any process area where possible contaminants are handled shall not be directed to any stream, storm drain or subsurface leaching system.

b. For those uses identified in Section 20.10 and 20.16 of these Regulations as requiring connection to a public sanitary sewer, floor drains shall discharge only to the public sanitary sewer.

c. Interior floor drains from any process areas where possible contaminants are handled shall be directed into a public sanitary sewer with the specified pretreatment as may be required by the Town Manager or Designee, DEP and/or the Glastonbury Water Pollution Control Authority.

d. When floor drains are to be connected to public sanitary sewers, the Applicant shall provide evidence of approval by the Glastonbury Water Pollution Control Authority and the Town Manager or Designee.

e. Floor drains, other than those in bathrooms or kitchen facilities, shall discharge only to sanitary sewers, a septic system or holding tank. The Applicant shall submit evidence of a DEP discharge permit when applicable.

f. For any floor drain connected to a holding tank, the Applicant shall provide a description of the method and frequency of removal and disposal of the accumulated waste in the holding tank. Holding tanks receiving discharges containing Hazardous Materials or Hazardous Substances shall meet standards for storage tanks specified in Section 20.8.1 of these Regulations and shall be provided with a containment area to prevent spills during transfer in the removal process.

20.8.3 On-site Septic System and Water Well Relationships for Nonresidential and Residential Uses.

Proposed uses that utilize both an on-site septic system and water well shall comply with the following requirements: (i) septic systems for a proposed sue shall not be permitted where the bedrock is overlain with less than five (5) feet of naturally occurring soil, or where the Seasonal High Groundwater Table is overlain with less than twenty-four (24) inches of naturally occurring soil (or in other terms, in order to have an acceptable location for a septic system one must have at least 24 inches of naturally occurring soil above the Seasonal high Groundwater Table and at least 5 feet of naturally occurring soil above bedrock);

and (ii) the bottom of leaching systems shall be no less than 5 feet above ledge and 25 inches above the seasonal High Groundwater Table.

20.8.4 Waivers

The Applicant may request that the Commission waive certain requirements contained within this Section 20.8 Waivers issued by the Commission shall require an action consisting of at least a 3/4th affirmative vote by members of the Commission then voting. An Applicant requesting a waiver shall submit their request in writing stating in full detail the grounds and facts relied upon in making the request. The Commission may not grant a waiver that would endanger the Groundwater resources or otherwise compromise the goals and objectives of this Section 20. The Commission shall state on the record the factual basis and the substantive reasons for its decision on the waiver request.

20.9 Establishment Of Groundwater Protection Zones And Boundaries

For the purposes of this Section 20, two overlay zones, as depicted on the map referred to in Section 20.9.1 of these Regulations, are established:

a. Groundwater Protection Zone 1 (GW-1) generally consists of all land underlain by coarse-grained Stratified Drift at the land surface. This zone has the most restrictive regulations and requirements due to the potential contamination of Groundwater. Groundwater availability is characterized by potentially yielding substantial quantities of water.

b. Groundwater Protection Zone 2 (GW-2) consists of all land classified as being Glacial Till that is generally mapped as having less than ten (10) feet thickness over bedrock. Restrictions in this zone are directed at protecting and preserving the bedrock Aquifer so it may provide the best possible quality and quantity of water in individual wells because this is the principle recharge area to the bedrock Aquifer.

20.9.1 Map

Boundaries of the Groundwater Protection Zones within the town are shown on the map entitled "Groundwater Protection Zones Map. Glastonbury, Connecticut Scale of 1 inch equals 1,500 feet, Approved October 10, 1995, Effective January 1, 1996" which is on file with the Glastonbury Town Clerk and the Office of Community Development. The map may be periodically updated based on new technical information as approved and adopted by the Commission after a Public Hearing.

20.9.2 Resolution of Boundary Disputes

There the boundaries of the Groundwater Protection Zone(s) are in dispute, the landowner must demonstrate that the boundaries shown on the map are incorrect based on evidence provided by a qualified hydro geologist. When doubt exists with respect to the conclusions to be drawn from the evidence of the hydro geologist, the Commission may commission a further study by an independent hydro geologist selected by the Commission to resolve the dispute.

20.10 Uses That Are Prohibited Or Otherwise Regulated Within The Groundwater Protection Zones

20.10.1 Prohibited Uses

Uses indicated by an "X" in the table that appears in Section 20.16 of these Regulations are prohibited in the specified Groundwater Protection Zones because such uses present unacceptable risks of contamination of Groundwater.

20.10.2 Uses Requiring a Groundwater Protection Permit.

Uses indicated by a "PR" in the table that appears in Section 20.16 of these Regulations require application for and approval of a Groundwater Protection Permit in the specified Groundwater Protection Zones because such uses are of concern and present possible unacceptable risks of contamination of Groundwater. When possible unacceptable risks of contamination of Groundwater. When an "*" (asterisk) accompanies the "PR" designation, then the use must also be connected to a public sanitary sewer or, as allowed by the Commission, the use area(s) connected to one or more holding tanks; otherwise the use is prohibited.

20.10.3 Conditional Uses

Uses indicated by a "C" in the table that appears in Section 20.16 of these Regulations are allowed in the specified zones, provided, however, that such use is connected to a public sanitary sewer and conforms with the applicable design standards and specifications set forth in Sections 20.8 and 20.13 of these Regulations. Ensuring conformance of conditional uses shall be an administrative function performed by the Town Manager or Designee.

20.10.4 Uses Allowed Provided That They Conform With Sections 20.8 and 20.13 of these Regulations.

Uses indicated by "OK" in the table that appears in Section 20.16 of these Regulations are allowed in the specified zones provided such use conforms to the applicable design standards and specifications set forth in Sections 20.8 and 20.13 of these Regulations. All other uses that are not specifically identified within the table are also allowed provided such use conforms to the applicable design standards and specifications set forth in Sections 20.8 and 20.13 if these Regulations. Ensuring conformance of conditional uses shall be an administrative function performed by the Town Manager or Designee.

20.11 Groundwater Protection Permit Process.

A Groundwater Protection Permit shall be obtained for those uses identified as requiring such a permit in Section 20.16 of these Regulations prior to:

a. the development of land for a regulated use;

b. additions or substantial changes to existing, established conforming or non-conforming regulated uses or an intensification of such use that provides an increased potential for contamination to the Groundwater as determined by the Commission; or

c. any change of use within a developed property.

Where a Groundwater Protection Permit is required, it shall be separate and in addition to the other requirements set forth in all land use regulations. In general, the Connecticut General Statues governing the procedures for and administration of special permits shall apply to Groundwater Protection Permits.

20.11.1 Permitting Agency

The Commission shall be the granting agency for all Groundwater Protection Permits. A public hearing shall be required for issuance of a Groundwater Protection Permit.

20.11.2 Application

An application for a Groundwater Protection Permit shall include the appropriate application fee and the following information:

a. Description of the intended use.

b. Distance to nearest domestic or public drinking water supply wells. Any additional available information concerning the well drawdown area or area of contribution.

c. Provisions for storm water runoff controls, including a detailed drainage plan with design and location of parking lots, loading areas, and access roads, location of storm drains and points of discharge; location and design details for detention basins; storm water control systems and provisions for their long-term maintenance must meet the applicable performance and design standards within this section.

d. Expected types and amounts of discharges to sewers, to the ground, and to surface water, and location and design of floor drains, septic systems, and/or sewage lift pump stations and force mains, showing that the meet the applicable performance and design standards within Section 20.

e. Proposed heating source for any building, including fuel type, storage facility, feedline type and location.

f. Location and description of all indoor and outdoor storage area, types of materials to be stored, showing that storage facilities meet applicable performance and design standards within this section.

g. Inventory and Material Safety Data Sheets for all hazardous and toxic materials, and Emergency Release Response Plan, as required under Superfund Amendments and reauthorization Act (SARA) regulations (40 CFR 370, 372).

h. Description of any use of fertilizers, pesticides or herbicides on areas larger than two (2) acres, showing the proposed uses and areas and that these meet the applicable performance and design standards within Section 20.

i. Additional geologic and/or hydrologic information may be required by the Commission such as existing well installations, logs of wells, and analysis of water quality and, hydrologic studies (impact assessment and monitoring provision, etc).

j. The owner and/or the owner's authorized agent shall submit a letter of consent which gives the Commission and/or its Authorized Agents the right of entry for purposes of inspection to verify compliance with permit requirements.

20.11.3 Review Procedure

The Applicant, at the time of any application made by an Applicant, shall be responsible for submitting a competed Groundwater Protection Permit application to the Authorized Agents. The Applicant shall provide additional copies of the completed application as directed. The Commission designated reviewing agencies. If the Commission or any reviewing agency determines that the proposed use is likely to adversely impact Groundwater resources, the Commission may refer the application to the Connecticut Departments of Environmental Protection and/or Health Services for their comments. All designated reviewing agencies planning to provide comment shall submit written comments to the Commission within a thirty (30) day time frame.

20.11.4 Decision Criteria

No Groundwater Protection Permit shall be issued by the Commission for any proposed use likely to cause a substantial or material adverse impact to the quality or quantity of the Groundwater resources. In its decision, the Commission shall clearly state the reasons for the basis of their decision.

20.11.5 Conditions of Approval.

The Commission may include as conditions of approval of a Groundwater Protection Permit any requirements deemed necessary by the Commission to ensure adequate long-term protection of Groundwater resources. Conditions of approval may include, but are not limited to Groundwater monitoring, water quality impact assessment or hydrogeologic study, fertilizer and pesticide management plan, maintenance of storm water controls and septic systems, or other protection measures, including bonding.

20.11.6 Bonding

The Commission may require the Applicant to post a bond to cover all or a portion of the estimated 1) construction costs for structural components related to protecting the Groundwater including, but not limited to the applicable design standards and specifications and 2) operational and maintenance costs for said structural components.

20.11.7 Compliance to the Permit

No Certificate of Occupancy shall be issued until the Applicant's engineer has submitted a Letter of Compliance to the office of Community Development certifying that: the completed project complies with the Groundwater protection related planning and design components of the application; and all of the conditions set forth in the Applicant's Groundwater Protection Permit.

20.12 Exemptions

A Groundwater Protection Permit shall be required for a change in tenant provided all of the following conditions are met, as determined by the Authorized Agents; A) No intensification of use or change in use or change in material s or processes at the site; B) No exterior structural changes to the building, parking areas or drainage systems; C) No floor drain installations; and D) No additional chemical or Hazardous Material storage.

20.13 Special Design Standards And Specifications For The Groundwater Protection Zones

In addition to the requirements established in Section 20.8 of these Regulations, the following design standards and specifications shall be applied to proposed land uses within the GW-1 and GW-2 zones. This Section 20.13 shall be administered by the Town Manger or Designee and such administration includes, but is not limited to determining compliance tot eh design standards and specifications. All proposed uses and applicable nonconforming uses pursuant to Section 20.5 of these Regulations shall conform to specified standards.

20.13.1 Nitrogen Loading

The total nitrogen loadings to the Groundwater shall not exceed ten milligrams per liter (10 mg/l) for those land areas proposed for disturbance, alteration and construction. The Town Manager or Designee may, upon their discretion, require ore stringent standards to address special Groundwater protection needs. The Town Manager or Designee may require that the total nitrogen loadings to the Groundwater shall not exceed: five milligrams per liter (5 mg/l) in the GW-1 Zone; and seven milligrams per liter (7 mg/l) in the GW-2 Zone. A mass balance equation shall be used to predict the resulting total nitrogen loading, summing the nitrogen mass from sources such as sewage effluent, road runoff, fertilizers, precipitation and other natural and man-made sources along with the recharge volumes from such sources. Total nitrogen predictions shall utilize the state-of-the-art nitrogen loading assessment technique prepared by the Cape Cod Commission, Barnstable, Massachusetts; the specifics of this technique are contained in Technical Bulletin 91-001 Nitrogen Loading, dated April 1992, prepared by Eduard M. Eichner, Water Resources Planner/Environmental Scientist and Thomas C. Cambareri, Water Resources Coordinator/Hydrogeologist of the Water Resources office (Armando J. Carbonell, Executive Director, Cape Cod Commission, 3225 Main Street, P.O. Box 226, Barnstable, MA 02630, (508) 362-3828). An existing residential building lot that was created by an approved subdivision is exempt from this requirement.

20.13.2 Additional On-Site Septic System and Water Well Relationships.

Separating distances between septic systems and wells in GW-1 and GW-2 zones shall be established based upon the findings of a Comprehensive Site-Specific Evaluation, but never less than the State Public Health Code Requirements, as determined by the Town Manager or Designee. An existing residential building lot that was created by an approved subdivision is exempt from this requirement.

20.13.3 Maintenance of Water Infiltration Potential

The maximum allowable net reduction of water infiltration potentials to recharge the Groundwater shall be fifty percent (50%) of the pre-development (pre-use) conditions. Quantitative analyses of pre and post development site characteristics, including any designed mitigating provisions, shall be provided as documentation. The use of mitigating provisions shall not affect the quality of water proposed for infiltration. An existing residential building lot that was created by an approved subdivision is exempt from this requirement.

20.13.4 Storm water Management Facilities

Storm water controls shall be designed to manager site runoff so that storm water runoff will not cause contamination of the Groundwater. All proposed uses shall include a maintenance plan providing for regular inspection, cleaning and long-term maintenance of storm water controls, including basins and pretreatment structures prepared by the Applicant or by the town as determined at the time of review by the Town Manager or Designee.

20.13.5 Public Sanitary Sewers

a. Sanitary sewers shall be constructed using tight pipe standards. Monitoring for subsurface leaks shall be provided at a select number of potentially crucial joints to verify the ling-term integrity of the pipe.

b. Pump/Sewage Lift Stations, Force Mains

1. Sewage lift stations shall be duplex installations with each pump capable of pumping the projected peak daily flows.

2. Installations/developments with less than 5,000 gallons of sanitary wastewater per day shall: (i) be equipped with a storage tank capable of holding the volume of a day's peak daily flow; or (ii) be equipped with an emergency generator with an automatic start-up plus pumping equipment that shall be connected to a continuously monitored remote alarm automatically activated in the even of equipment or power failure.

3. Installations/developments with greater than 5000 gallons of sanitary wastewater per day shall be equipped with an emergency generator with an automatic start-up. Sewage pumping equipment shall be connected to a continuously monitored remote alarm automatically activated in the even of equipment or power failure.

20.13.6 Golf Courses

Any application for a Groundwater Protection Permit for a golf course located entirely or partially within the GW-1 or GW-2 zones shall include a Groundwater impact assessment based on a hydrogeologic analysis of a detailed monitoring program and plan for the utilization of pesticides and fertilizers, including types and rates of application.

Monitoring programs shall be established to meet the following specifications:

a. There shall be a minimum of one upgradient and two downgradient water quality monitoring wells required, with placement and design to be determined.

b. A system to monitor water quality below the root zone shall be installed under one green to measure the potential for leaching of pesticides and fertilizers to Groundwater.

c. The Applicant shall be responsible for the periodic collection of samples and for having them analyzed for nitrate nitrogen, total nitrogen and for all pesticide applied. Analyses shall be performed by a laboratory certified by the Connecticut Department of Health Services, Laboratory Standards Divisions, and results shall be promptly transmitted to the Town Manager or Designee.

d. Monitoring shall be done on a quarterly basis, except that if no concentration exceeding the re-sampling levels specified in (e) below are detected for a period of five years, and the types of chemicals applied have not changed, monitoring frequency may be reduced to twice a year with approval of the Town Manager or Designee.

e. If detectable concentrations of pesticides or nitrate nitrogen levels in excess of five milligrams per liter (5 mg/l) or nitrite nitrogen levels in excess or 0.5 mg/l are detected in any sample, all applications of the substance shall cease until subsequent sampling conducted at such times and under conditions reasonably acceptable to the Town Manager or Designee shows concentration below these levels.

f. Where feasible, irrigation wells for golf courses shall be located to intercept and recycle Groundwater that may potentially be contaminated by fertilizer and pesticide applications.

20.13.7 Floor Drains

The Applicant shall be required to submit evidence showing that the proposed discharge form floor drains serving any sue area not involving Hazardous Materials shall only be directed to sanitary sewers, a septic system or holding tanks and said drain will not adversely impact the Groundwater resources.

20.13.8 Underground Storage Tanks

No existing non-residential underground storage tank in the GW-1 and GW-2 zones shall be replaced by an underground tank unless it is used for storage of gasoline or other Hazardous Material or Hazardous Substances that cannot be safely stored above ground. Total volume of the replacement underground tanks permitted under this provision shall not exceed the volume of the existing tank.

20.13.9 Monitor Wells

In order to adequately provide for secured, long term testing of the Groundwater, the need for one or more Groundwater monitor wells or easements for future monitor wells shall be evaluated and the Town Manager or Designee shall hereby be authorized to require any such monitor wells or easements for future monitor wells. Such provisions shall be responsive to the type and density of the development project. A well or easement for a future well shall be located downgradient of the land use and capable f detecting any contaminants resulting from the land use. Any well established shall be installed to allow for sampling that is responsive to the types of potential contaminants; sampling may be required at different depths below the water table. Access easements in favor of the Town shall be provided for such monitor wells in order for the Town Manager of Designee to have Groundwater samples collected.

20.13.10 Waivers

The Applicant may request that the Commission waive certain requirements contained within this Section 20.13. Waivers issued by the Commission shall require an action consisting of at least a 3/4th affirmative vote by members of the Commission then voting. An Applicant requesting a waiver shall submit their request in writing stating in full detail the grounds and facts relied upon in making the request. The Commission may not grant a waiver that would endanger the Groundwater resources or otherwise compromise the goals and objectives of this Section 20. The Commission shall state on the record the factual basis and the substantive reasons for its decision on the waiver request.

20.14 Inspection And Enforcement

20.14.1 Right of Entry

Any application for an administrative approval or Commission permit under Section 20 shall constitute permission to the Commission, its members and Authorized Agents, and the Town Manager or Designee

shall have the right to enter upon privately owned property for the purposes of inspection to determine the applicability of and/or compliance with these Regulations.

20.14.2 Enforcement

Enforcement actions shall be as authorized under Section 11.3 of these Regulations.

20.15 Variances

The prohibition against granting of use variances by the Zoning Board of Appeals shall be applicable to these Groundwater protection regulations of this Section 20.

x	=	prohibited
pr	=	groundwater protection permit required
*	=	requires connection to sanitary sewers or holding tank(s)
C	=	allowed if on sanitary sewers and meets standards
OK	=	allowed if meets standards

20.16 Table Of Prohibited, Regulated And Allowed Uses In The Groundwater Protection Zones

USE, USE CATEGORY AND/OR SUBCATEGORY	GW-1	GW-2
RESOURCE PRODUCTION AND EXTRACTION USES		
Earth products, excavation and filling or removal of	PR	PR
Greenhouse (commercial) not meeting the definition	PR	PR
Nursery (commercial) of "farm" (Sec. 2.17)	PR	PR
Saw mill associated with commercial forestry production	PR	PR
RESIDENTIAL USES		
Constructions of structures	OK	OK
Underground fuel storage as an accessory residential use	X	X
Customary home occupation involving storage or handling of a hazardous material or substance as an accessory use	PR*	PR*
Convalescent, nursing or rest home or sanitarium	C	C
OFFICE, GENERAL AND/OR PROFESSIONAL USES		
Usage that involves a chemical or biological processing or laboratory as an accessory use	PR*	PR*
Usage with operations involving small quantities of hazardous materials	C	C
Usage with operations involving large quantities of hazardous materials	PR*	PR*
Underground fuel storage as an accessory use	X	X
SERVICE USES		
Any usage that involves chemical or biological processing or laboratory	PR*	PR*
Any usage with operations involving small quantities of hazardous materials	C	C
Any usage with operations involving large quantities of hazardous materials	PR*	PR*
Any usage that involves underground fuel or chemical storage or distribution lines	X	X
Any usage that involves maintenance, washing, servicing or repair of service-owned motor vehicles and/or equipment as an accessory use	PR*	PR*
Business Services, except warehousing and storage and motor vehicle rental service		
Biological laboratory or research facility	PR*	PR*
Carpet, rug or fabric cleaning operation	PR*	PR*
Copying machines and supplies	PR*	PR*
Dog kennel (commercial)	PR*	PR*
Dry cleaning operation	PR*	PR*
Extermination service or pest control operation (commercial)	X	X
Funeral home or parlor, mortuary, morgue or embalming operation	PR	PR
Furniture stripping, refinishing or reconditioning operation	PR*	PR*
Horse stable (commercial)	PR	PR
Hospital	PR*	PR*
Laundromat (self service laundry)	C	C
Laundry operation (commercial or industrial)	PR*	PR*
Lawn care establishment involving a large quantity of hazardous material	X	X
Lawn care establishment involving a small quantity of hazardous material	PR	PR
Lawn care establishment involving no hazardous material other than portable fuel	OK	OK

USE, USE CATEGORY AND/OR SUBCATEGORY	GW-1	GW-2
containers that are less than 11 gallons		
Medical research facility	PR*	PR*
Photographic processing or laboratory	PR*	PR*
Print shop	PR*	PR*
Professional Services		
Dentist	C	C
Medical or health care treatment facility or clinic	PR*	PR*
Physicians	C	C
Veterinarian services	PR*	PR*
Personal Services		
Beauty shop, salon or parlor	C	C
Cemetery	PR	PR
Educational Services that involve chemical or biological laboratories, industrial arts, automotive repair, a vocation or trade	PR*	PR*
Municipal Government Services		
Ambulance facility	C	C
Animal shelter	PR*	PR*
Firehouse	PR	PR
Motor vehicle or equipment repair or maintenance, including garages	PR*	PR*
Storage of:		
1. Underground fuels or large quantity of hazardous material	PR	PR
2. Above ground fuels or large quantity of hazardous material	PR	PR
3. Road salt or other ice control chemicals	PR	PR
4. Fertilizers or pesticides	PR	PR
Repair Services		
Motor vehicle repair and services		
Carwash	PR*	PR*
General repair and service	PR*	PR*
Limited repair and service that works on cooling or fuel systems	PR*	PR*
Other limited repair and service	C	C
Gasoline and/or service station	PR	PR
Boat or marine inboard or outboard servicing, maintenance, repair or reconditioning or the painting or chemical treatment of boats	PR	PR
Power equipment or small engine repair service (e.g. lawn mowers, snow blowers, chain saws, other liquid fuel driven equipment)	PR	PR
Appliance repair and service that involves fluids or other substances considered to be hazardous materials and with the potential of contamination of groundwater upon their escape	PR	PR
TRADE USES		
Any usage that involves chemical or biological processing or laboratory	PR*	PR*
Any usage with operations involving small quantities of hazardous materials	C	C
Any usage with operations involving large quantities of hazardous materials	X	PR*
Any usage that involves underground fuel storage	X	X
Any usage that involves maintenance washing, servicing or repair of trade-owned motor vehicles and/or equipment as an accessory use	PR*	PR
Retail Trade		
Automotive, marine craft, aircraft and accessories	PR	PR
Building materials, hardware and farm equipment/supply that involves the handling or storage of hazardous material in quantities greater than associated with normal household use, except as a product for distribution to the general public and packaged in quantities appropriate for normal household use or residentially oriented agricultural practices	PR	PR

USE, USE CATEGORY AND/OR SUBCATEGORY	GW-1	GW-2
Fuel delivery operations (e.g. oil dealers)	PR	PR
Wholesale Trade and Warehousing		
Chemicals and allied products	X	X
Petroleum bulk stations and terminals	X	X
Petroleum products	X	X
Paints, varnished and allied products	X	X
Warehousing of hazardous materials or substances, except as a product for distribution to the general public and packaged in quantities appropriate for normal household use or residentially oriented agricultural practices	X	X
Self-storage facility	PR	PR
MANUFACTURING USES		
Any usage that involves chemical or biological processing or laboratory	PR*	PR*
Any usage with operations involving small quantities of hazardous materials	PR*	C
Any usage with operations involving large quantities of hazardous materials	X	PR*
Any usage that involves underground fuel storage	X	X
Any usage that involves maintenance, washing, servicing or repair of manufacturer-owned vehicle and/or equipment as an accessory use	PR*	PR
Apparel and other finished projects made from fabrics, leather and similar materials, except the processing, tanning or making of leather	PR*	PR
Food and kindred products	PR*	PR
Furniture and fixtures	PR*	PR
Lumber and wood products, except furniture	PR	PR
Printing, publishing and allied industries	PR*	PR*
Professional, scientific and controlling instruments; photographic and optical goods; watches and clocks	PR*	PR*
Stone, clay and glass products, especially mirrors	PR*	PR
Textile mill products	X	X
Paper and allied products	X	X
Chemical and allied products	X	X
Petroleum refining and related industries	X	X
Rubber and rubber coating products	X	X
Plastic molding	PR*	PR*
Primary metal industries	X	X
Fabricated metal products		
Machine shop (general)	PR*	PR*
Metal plating, electroplating, etching, cleansing and degreasing operations	X	X
Leather tanning or finishing	X	X
Miscellaneous manufacturing	PR	PR
CULTURAL, ENTERTAINMENT AND RECREATIONAL USES		
Any usage that involves chemical or biological processing or laboratory	PR*	PR*
Any usage with operations involving small quantities of hazardous materials	C	C
Any usage with operations involving large quantities of hazardous materials	PR*	PR*
Any usage that involves underground fuel storage	X	X
Any usage that involves maintenance, washing, servicing or repair of use-owned vehicle and/or equipment as an accessory use	PR*	PR
Golf course	PR	PR
Marina	PR	PR
TRANSPORTATION, COMMUNICATION AND UTILITY USES		
Any usage that involves chemical or biological processing or laboratory	PR*	PR*
Any usage with operations involving small quantities of hazardous materials	C	C
Any usage with operations involving large quantities of hazardous materials	PR*	PR*
Any usage that involves underground fuel storage	X	X

USE, USE CATEGORY AND/OR SUBCATEGORY	GW-1	GW-2
Any usage that involves maintenance, washing, servicing or repair of use-owned vehicle and/or equipment as an accessory use	PR*	PR
Airport landing field	PR	PR
Automobile public parking garage or public lot	PR	PR
Motor vehicle transportation center	X	PR*
Motor freight transportation terminal or garage	X	PR*
Bus transportation		
Garaging and equipment maintenance	X	PR*
Passenger terminal	PR	PR
Transmission of hazardous materials or fuels, except natural or propane gas	X	X
Any use in which groundwater is removed for purpose of heating, cooling or other non-consuming processes	PR	PR
Any use in which water that is used for heating, cooling or other non-consuming processes is returned or inserted into the ground by means of a well, pump or pipeline	PR	PR
Any use involving the removal of groundwater by any person, firm, association corporation or municipality by means of wells, pumps, pipelines or any similar equipment for the purpose of sale or export other than by such entities as may be exempted from local regulation by the Statutes of the State of Connecticut	PR	PR
WASTE DISPOSAL, as principal or accessory use		
Bulky waste	X	X
Septage or septic waste lagoon or pit	X	X
Tree stumps	X	OK
All other wastes, including hazardous materials	X	X
WASTE PROCESSING, as principal or accessory use		
Waste water or sewage treatment plant or facility (other than subsurface, on-site septic system)	X	X
Recovery processing that involves handling of hazardous materials	X	X
Recovery processing centers	X	X
Solid waste transfer stations	X	X